

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
30 June 2005 (30.06.2005)

PCT

(10) International Publication Number
WO 2005/058603 A2

(51) International Patent Classification⁷: **B41J 2/00**
(21) International Application Number:
PCT/GB2004/005129

(22) International Filing Date:
10 December 2004 (10.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0328861.0 12 December 2003 (12.12.2003) GB

(71) Applicant (for all designated States except US): **INCA
DIGITAL PRINTERS LIMITED** [GB/GB]; 511 Cold-
hams Lane, Cambridge CB1 3JS (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **EVE, Richard,
William** [GB/GB]; Flat B, 2A Gresham Road, Cambridge
CB1 2EP (GB).

(74) Agents: **MURRAY, Elisabeth, Anne et al.; Mathys &
Squire**, 120 Holborn, London EC1N 2SQ (GB).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

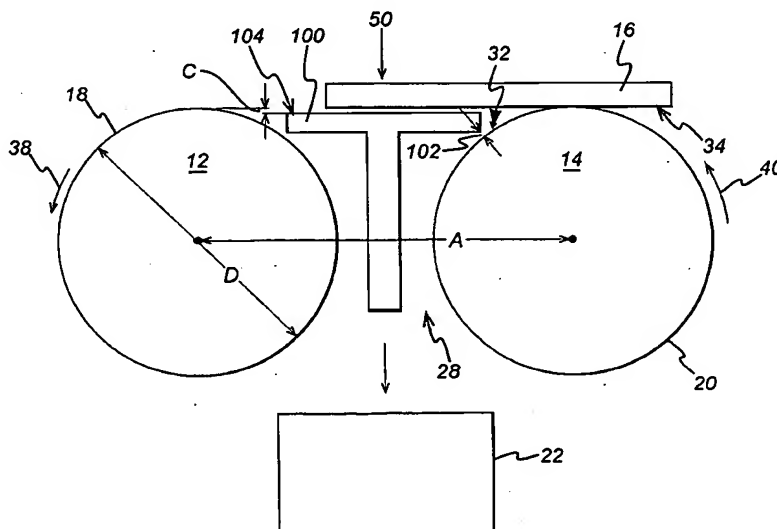
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished
upon receipt of that report

[Continued on next page]

(54) Title: **PRINTING MOVING SUBSTRATES**



(57) Abstract: An ink jet printing apparatus for printing on a moving substrate (16) is described. The apparatus comprises ink jet printheads (4) for printing on a surface of the substrate, a plurality of rollers (12, 14) arranged to move the substrate (16) relative to the printheads 4, and a pressure source (22). The pressure source (22) is arranged to apply a negative gauge pressure (32) to the substrate (16). The application of the pressure can hold the substrate flat and can reduce undesired movement of the substrate relative to the rollers (12, 14). The apparatus allows for high quality full colour images to be printed onto substrates in a single pass using an ink jet printer.

WO 2005/058603 A2



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.